

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-16. (Canceled)

17. (Currently Amended) A method of storing data into a database, the method comprising:

The method of Claim 1, further comprising:

a loader application receiving data;

determining one or more routines that are associated with a type of said data, wherein said

one or more routines are implemented by a program that is external to both said

loader application and a database server that manages said database;

said program registering, with said loader application, said one or more routines, which

are not implemented by said loader application; [[and]]

in response to said program registering said one or more routines with said loader

application, said loader application adding, to a dispatch table, an entry that

indicates an association between said one or more routines and an opaque type

implemented by said program;

invoking said one or more routines;

in response to said one or more routines being invoked, said program performing steps

comprising:

creating a data structure that has one or more elements that correspond to one or

more attributes of said type; and

populating said one or more elements with one or more values that are specified in

said data, wherein said one or more values correspond to said one or more

attributes;

generating, based on said data structure, a data stream that conforms to a format of data
blocks of said database; and
writing said data into one or more data blocks in said database.

18. (Currently Amended) A method of storing data into a database, the method comprising:
a loader application receiving data;
determining one or more routines that are associated with a type of said data, wherein said
one or more routines are implemented by a program that is external to both said
loader application and a database server that manages said database;
invoking said one or more routines;
in response to said one or more routines being invoked, said program performing steps
comprising:
creating a data structure that has one or more elements that correspond to one or
more attributes of said type; and
populating said one or more elements with one or more values that are specified in
said data, wherein said one or more values correspond to said one or more
attributes;
generating, based on said data structure, a data stream that conforms to a format of data
blocks of said database; and
writing said data into one or more data blocks in said database;

wherein invoking said one or more routines comprises:

 said loader application invoking at least one of said one or more routines to find out (a) a

 number of one or more attributes within an opaque type and (b) one or more types

 of said one or more attributes within said opaque type; and

 said loader application invoking at least one of said one or more routines to populate,

 with values of instances of the opaque type, elements of an array that is stored in a

 memory space of said loader application.

19. (Previously Presented) A computer-readable storage medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 17.
20. (Previously Presented) A computer-readable storage medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 18.